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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,930	03/09/2001	Gunter Kohrmann	740116-317	3450
22204	7590	04/06/2004	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			QUAN, ELIZABETH S	
			ART UNIT	PAPER NUMBER
			1743	

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/801,930

Applicant(s)

KOHARMANN ET AL.

Examiner

Elizabeth Quan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4-9,11-35,37 and 38 is/are pending in the application.
- 4a) Of the above claim(s) 27-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4,5,8,9,11-26,37 and 38 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/13/2004 & 3/9/2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Election/Restrictions***

1. Applicant's election of the invention of I, claims 1-26, 36, and 37 as indicated in Office Action mailed 9/29/2003 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Drawings

2. The drawings were received on 1/13/2004. FIGS. 2b, 2c, and 2d of the drawings are unacceptable since they contain new matter. Although the specification mentions snap connections and quick screw connections, such as quadrant screw connections, as examples of positive-fit connections as well as the elements labeled with numerals, the specification never indicated the structural relationship of the elements to form the drawing received on 1/13/2004. For instance, the closure carrier in Fig. 2c shows the sockets as wells extending upwardly from the closure carrier. The sockets of the original drawings show the sockets as openings formed into the closure carrier. Figs. 2c and 2d show the sockets with a circular cross-section, but the sockets of the original drawings do not have a circular cross-section. Figs. 2c characterizes element (8) as snap ring and element (9) as counter-ring, which were not present in the original disclosure and drawings. Figs. 2c and 2d show the closure element with more details than the closure element in the original drawings as presented in figs. 4 and 5. Fig. 2b has elements, such as camber (4a) and closure handling device (5a), that were not in the original specification. None of the original drawings has these elements. In all these figures the elements could have a different structural configuration, forming a different connecting relationship.

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3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "4a" has been used to designate both camber and membrane section and reference character "5a" as both closure handling device and central passage point. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the closure handling device with a quick screw connection, snap connection, link part, and positive and non-positive fit element must be shown or the feature(s) canceled from the claim(s). The non-positive fit connection on the outside at the actuating section must be shown. The actuation tool with a tenon part must be shown. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The amendment filed 1/13/2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material, which is not supported by the original disclosure, is as follows: The description of newly submitted figs. 2b, 2c, and 2d. The original disclosure does not provide support for the new drawings of the inventions, which has new elements, such as snap ring (9) and counter-ring (9).

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

6. Claim 38 is objected to because of the following informalities: In line 24 after “actuating section” “of” should be deleted and --and-- should be inserted. If Applicant disagrees, then there is a 112 problem since the socket does not have an actuating section. In the last line after “the” “then” should be deleted. Appropriate correction is required.

7. Claim 20 is objected to because of the following informalities: “wherien” should be “wherein”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 12, 17, 18, 37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is unclear what characterizes a non-positive fit element or connection. The specification does not give adequate written description for what constitutes as a non-positive element or connection. The specification does not even give examples of non-positive elements or connections as it did positive connections. It is also unclear how an element, such as the closure handling device, is characterized as a positive-fit element.

10. Claims 13-17 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the exterior of the closure element to be positive-fit, screw, snap, or

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bayonet type, does not reasonably provide enablement for the closure handling device to be non-positive fit, screw, snap, or bayonet type or the actuation tool with a tenon part or as a non-positive fit element. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make/use the invention commensurate in scope with these claims. Neither the specification nor drawings disclose such details of the closure handling device.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

12. Claims 2, 4-9, 11-26, 37, 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claims 17, 18, 37 are rendered indefinite since independent claim 38 has already claimed a positive fit connection between the actuating section and socket, such that it would be inconsistent and contradictory and make no sense to later claim that the connection is non-positive fit.

14. Claim 38 is rendered indefinite since it is unclear what is meant by the closure section tightly “scaling” the access aperture. Merriam-Webster Dictionary does not provide any definition that makes sense in the current context of the claim. It is also unclear what is meant by the closure carrier “staying” on the plate or strip.

15. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the elements that make up the bayonet closure element.

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16. Claims 21, 22 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the structure relationship between the closure section and camber and closure section and membrane section.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claims 2, 4, 11, 19-22, 38 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/54292 to Malmqvist.

Malmqvist discloses an arrangement for the contamination-free processing or reaction sequences (see FIGS. 2 and 4). At least two reaction vessels (1), which are arranged next to one another and connected to one another on a microtiter plate, are open to the top (see FIGS. 2 and 4; PAGE 6, lines 30-34). An individual closure element (4), which fits into the aperture of each reaction vessel, has a closure section for the tight sealing of the reaction vessel and an actuating section for engagement of the individual closure element (see FIGS. 2 and 4). Fig. 1 shows the closure section of the closure element tightly sealing the reaction vessel. When the closure section of the individual closure element enters into the reaction vessel, the closure section of the individual closure element forms a plug (see FIGS. 2 and 4). It appears that the closure section has a slight curvature facing downwards. A closure carrier (6) covers all the reaction vessels

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(see FIGS. 2 and 4). The closure carrier is provided with sockets, one for each reaction vessel and through which the closure element is inserted (see FIGS. 2 and 4). Each socket is associated with an actuating section of each individual closure element for securing the individual closure element to the closure carrier (see FIGS. 2 and 4). The individual closure element can be inserted in the direction reversed from that taught, which is underneath the closure carrier, by inserting the actuating section through the socket until the closure section contacts the socket. It appears that either side of the closure carrier may be placed directly in contact with the reaction vessels. The closure sections of the individual closure elements are capable of being moved through the access openings in the closure carrier by moving the closure element in a downward direction to place the closure element through the socket such that the closure section protrudes from the bottom end of the socket and moving the closure element in an upward direction such that the closure section in its entirety is above the socket. The closure elements are secured to the closure carrier by a releasable positive-fit connection between the actuation section and the socket (see FIGS. 2 and 4). It appears that each closure element can be individually removed from the closure carrier and reaction vessel to allow access into the reaction vessel and the closure elements can be removed from the reaction vessel by maneuvering the closure carrier (6) (see FIGS. 2 and 4). When the closure element is placed into the socket of the closure carrier, the closure section overlaps the reaction vessel (see FIGS. 2 and 4). It appears that there is a closure handling device for engaging an actuation tool, which handles a single individual closure element (see FIGS. 2 and 4). It appears that the closure element has a central passage point (see FIGS. 2 and 4).

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Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

21. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

22. Alternatively, claims 2, 4, 5, 8-22, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/54292 to Malmqvist in view of DE 3407787 or DE 2604540 or DE 2459667 and U.S. Patent No. 5,603,899 to Franciskovich et al. and U.S. Patent No. 6,312,648 to Lenardo et al.

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It appears that Malmqvist discloses a closure forming a positive-fit connection with the closure carrier. Even if one were to argue that the closure of Malmqvist does not form a positive-fit connection with the closure carrier, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connection between the closure and closure carrier in Malmqvist to provide the well-known positive-fit connection for effectively securing the closure to the closure carrier. Malmqvist do not explicitly disclose a quick screw connection, snap connection, or other types of locking/fastening mechanism for forming a positive-fit connection. However, these locking/fastening mechanisms between the closure element and container are very well known. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the closure of Malmqvist to use a bayonet closure element, which is a unique locking mechanism for easy removal that prevents unauthorized opening as taught by each German document as noted above, to use a quick screw connection for secure engagement between closure element and socket of the closure carrier as taught by Franciskovich et al., snap connection for effective sealing as taught by Lenardo et al., or other types of locking/fastening mechanism for positive connections as they are very well known and commercially available.

23. Claims 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/54292 to Malmqvist in view of U.S. Patent No. 5,112,574 to Horton and U.S. Patent No. 5,247,015 to Bayan.

Referring to claims 23 and 24, Malmqvist does not explicitly disclose that different sections of the closure element is made from materials of different rigidity or softness and the closure element is made from a thermoplastic elastomer. However, it would have been obvious

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to one having ordinary skill in the art at the time the invention was made to modify the closure element of Malmqvist to make it from a thermoplastic elastomer for reduced possibility of chemical degradation as taught by Bayan (see COL. 2, lines 60-68) and make the different sections of the closure element from materials of different rigidity or softness for a fairly secure closure element as taught by Horton (see COL. 4, lines 17-21).

Allowable Subject Matter

24. Claims 6 and 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

25. Applicant's arguments filed 1/13/2004 have been fully considered but they are not persuasive.

26. Applicant argues that the closure carrier (6) is kept at a distance from the plate (5) carrying the reaction vessels in Malmqvist. Applicant further argues that it is impossible in Malmqvist to position all individual closure elements on all reaction vessels simultaneously by placing the closure carrier with the closure elements onto the plate with the reaction vessels. Applicant explains that the closure element (4) (or at least some) will pop out of the sockets in the closure carrier because the matching forces for all components is difficult with such friction fit.

27. Examiner maintains that the current claim recites the closure carrier placed on top of the plate or strip and describes the closure carrier as staying on the plate or strip. The closure carrier may be placed on the plate or strip without touching the plate or strip. Furthermore, it is not

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impossible to position all individual closure elements on all reaction vessels simultaneously by placing the closure carrier with the closure elements onto the plate with the reaction vessels.

Each of the closure elements may be almost fully inserted into respective reaction vessels as depicted in fig. 1, such that the closure carrier will rest upon the reaction vessel and the closure element will sit on closure carrier. In this perspective the closure element will not pop out of the sockets of the closure carrier. In fact, the closure carrier is neatly sandwiched in between the closure element and reaction vessel, such that the closure elements contact the closure carrier and is inserted into the reaction vessels as far into them as possible and the closure carrier rests upon the reaction vessels and plate with reaction vessels as closely as possible.

Conclusion

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Quan whose telephone number is (571) 272-1261. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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